UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.    | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--------------------|-----------------------------------|----------------------|-------------------------|------------------|
| 10/567,489         | 09/25/2006                        | Cyrill Linnot        | 0543-1016               | 1031             |
| 466<br>YOUNG & TH  | 7590 09/12/200<br>OMPSON          | EXAMINER             |                         |                  |
| 209 Madison Street |                                   |                      | KEMMERLE III, RUSSELL J |                  |
|                    | Suite 500<br>ALEXANDRIA, VA 22314 |                      |                         | PAPER NUMBER     |
|                    |                                   |                      | 1791                    |                  |
|                    |                                   |                      |                         |                  |
|                    |                                   |                      | MAIL DATE               | DELIVERY MODE    |
|                    |                                   |                      | 09/12/2008              | PAPER            |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|
|  | 10/567,489  | LINNOT ET AL.  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |
|  | RUSSELL J. KEMMERLE III   | 1791   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |   |  |  |  |  |
| 1) ☐ Responsive to communication(s) filed on <u>28 Arg</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under E  | action is non-final.<br>nce except for formal matters, pro  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |
| 4) ☐ Claim(s) 34-66 is/are pending in the application 4a) Of the above claim(s) 46-66 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 34-45 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or  Application Papers  9) ☐ The specification is objected to by the Examiner 10) ☐ The drawing(s) filed on is/are: a) ☐ access the applicant may not request that any objection to the company of the papers.   | rn from consideration. relection requirement. r. epted or b) □ objected to by the Edrawing(s) be held in abeyance. See  | e 37 CFR 1.85(a).  |  |  |  |
| Replacement drawing sheet(s) including the correcti  11) The oath or declaration is objected to by the Ex-   |   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 18 July 2006.  | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:  | nte  |  |  |  |

Application/Control Number: 10/567,489 Page 2

Art Unit: 1791

#### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election with traverse of group I, claims 34-45, in the reply filed on 28 April is acknowledged. The traversal is on the ground(s) that all groups have a common special technical feature, specifically the mold recited in claim 34. This is not found persuasive because, while it is agreed that the mold of claim 34 is different than the mold disclosed in Loxley (US Published Application 2002/0152768) the mold of claim 34 does appear to be the same as that recited in DE 10130186 (as discussed in detail below under the prior art rejection). Therefore, since the special technical feature which links the claims together is found to have been previously known in the prior art, the groups lack unity of invention under PCT rule 13.1 and 13.2, and thus restriction between the groups is proper.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 34, 35, 37-39, 42, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner (DE 10130186, based on the English abstract submitted by Applicant).

Wagner discloses a mold for slip casting a ceramic article where a slurry is poured into a porous body and a inflatable body is introduced into the slurry and inflated creating a hollow area in the ceramic being formed while a wall is delimited.

Referring to claim 35, Wagner shows the distance between the interior inflated body and the exterior mold as being close to constant across most of the mold (Fig 3). Since the term "substantially constant" is not defined in any greater detail by the current specification, this is assumed to meet the limitation of claim 35.

Referring to claim 37, Wagner discloses a slip casting type of mold, which one of ordinary skill in the art would understand means it would absorb liquid in a manner similar to plaster (and in fact often is plaster).

Referring to claim 38, the inner portion is described as balloon like and is inflated (deformed) to achieve the final shape used to form the body.

Referring to claim 39, the inner portion of Wagner is deflated (removed toward the interior) in order to remove it after the article is formed.

Referring to claim 42, the inner portion of Wagner is removed by deflating which causes it to come unstuck from the article being formed.

Referring to claim 44, the inner portion of Wagner would inherently have to have an air injection hole in order to perform the inflation operation described.

Referring to claim 45, Wagner discloses a device holding the inner portion that could be considered a support (shown is reference number 9 in the figures).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 36, 40, 41 and 43 rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner, which is relied upon as discussed above.

Referring to claim 36, while Wagner does not specifically disclose the dimensions of the ceramic article created, it would be within the ability of one of ordinary skill in the art to adjust the distance between the inner portion and the outer mold in order to create an article of the desired size according to methods commonly used and understood.

Referring to claims 41 and 43, it would be obvious to one of ordinary skill in the art that the inner portion should be made from a material which is inert to the slurry to prevent any reaction from occurring and resulting in undesirable properties in the article formed, and silicone is a material known to be inert to ceramic slurries and capable of the deformation required by Wagner.

Referring to claim 40, the selection of the materials discussed above would meet the limitations of claim 40.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUSSELL J. KEMMERLE III whose telephone number is (571)272-6509. The examiner can normally be reached on Monday through Thursday, 7:00-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/567,489 Page 6

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/ Supervisory Patent Examiner, Art Unit 1791

/R. J. K./ Examiner, Art Unit 1791